WHAT IS CLAIMED IS:

1. An inhibitor that does not inhibit a catalytic activity of a wild-type enzyme but inhibits the same catalytic activity of the corresponding mutant enzyme, wherein the wild-type enzyme and the mutant enzyme are functionally identical.

2. The inhibitor of claim 1 that inhibits the catalytic activity of the mutant enzyme with an IC_{50} of less than about 200 nM.

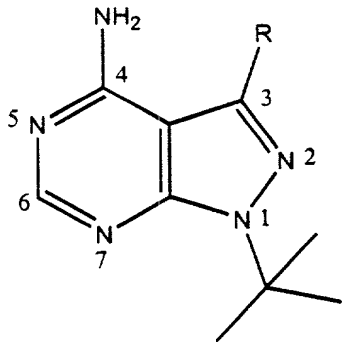
3. A method of inhibiting a catalytic activity of a mutant enzyme comprising contacting the mutant enzyme with an inhibitor of claim 1.

4. An inhibitor that does not inhibit the growth of a cell expressing a wild-type enzyme but inhibits the growth of a cell expressing a mutant form of the wild-type enzyme, wherein the wild-type enzyme and the mutant form of the wild-type enzyme are functionally identical.

5. The inhibitor of claim 4, wherein the inhibitor is selected from the group comprising a protein kinase inhibitor and a methyltransferase inhibitor.

6. A method of inhibiting the growth of a cell expressing a mutant enzyme comprising contacting the cell with an inhibitor of claim 4.

7. A protein kinase inhibitor represented by the following formula I:



wherein R is a 1′-naphthyl, 2'-napthyl; *m*-phenoxyphenyl; m-benzyloxyphenyl; *m*-2', 6'-dichloro,benzyloxyphenyl; 3-piperonylpyrazolo; *p-tert*-butylphenyl; 1'-naphthylmethyl; 1'-napthoxymethyl; or 2'-naphthylmethyl.

8. A protein kinase inhibitor of claim 7, wherein R is 1'-naphthyl.

9. A protein kinase inhibitor of claim 7, wherein R is 2'-naphthyl.

10. A protein kinase inhibitor of claim 7, wherein R is 1'-napthylmethyl.

11. A protein kinase inhibitor of claim 7, wherein R is 2'-napthylmethyl.

12. A composition comprising the protein kinase inhibitor of any of claims 7-11.

13. A method of disrupting transformation in a cell that expresses a mutant protein kinase of the Src family comprising contacting the cell with the protein kinase inhibitor of claim 7.

14. The method of claim 13, wherein the mutant protein kinase is I338G v-Src.

15. The method of claim 13, wherein the mutant protein kinase is T339G Fyn.

16. A method of disrupting transformation in a cell that expresses a mutant protein kinase of the Src family comprising contacting the cell with a composition comprising the protein kinase inhibitor of claim 7.

17. The method of claim 16, wherein the mutant protein kinase is I338G v-Src.

18. The method of claim 16, wherein the mutant protein kinase is T339G Fyn.

19. A method of inhibiting the phosphorylation of a substrate of a mutant protein kinase comprising incubating a protein kinase inhibitor of claim 7 with a mixture containing the mutant protein kinase and its substrate.

20. The method of claim 19, wherein the mutant protein kinase is a mutant protein kinase of the Src family.

21. The method of claim 20, wherein the mutant protein kinase is a mutant v-Src.

22. The method of claim 21, wherein the mutant v-Src is I338G v-Src.

23. The method of claim 19, wherein the mutant protein kinase is a mutant Fyn.

24. The method of claim 23, wherein the mutant Fyn is T339G Fyn.

25. The method of claim 19, wherein the mutant protein kinase is a mutant c-Abl.

26. The method of claim 25, wherein the mutant c-Abl is T315A Abl.

27. The method of claim 19, wherein the mutant protein kinase is a mutant CAMK IIα.

28. The method of claim 27, wherein the mutant CAMK IIα is F89G CAMK IIα.

29. The method of claim 19, wherein the mutant protein kinase is a mutant CDK2.

30. The method of claim 29, wherein the mutant CDK2 is F80G CDK2.

31. The method of claim 19, wherein the mutant protein kinase is a mutant Cdc28.

32. The method of claim 31, wherein the mutant Cdc28 is Cdc28-as1.

33. The method of claim 19, wherein the mutant protein kinase is a mutant Fus3.

34. The method of claim 33, wherein the mutant Fus3 is Fus-as1.

35. A method of inhibiting the catalytic activity of a mutant enzyme comprising incubating the mutant enzyme with an inhibitor of claim 7.

36. The method of claim 35, wherein the mutant enzyme is a mutant protein kinase of the Src family.

37. The method of claim 36, wherein the mutant protein kinase is a mutant v-Src.

38. The method of claim 37, wherein the mutant v-Src is I338G v-Src.

39. The method of claim 35, wherein the mutant protein kinase is a mutant Fyn.

40. The method of claim 39, wherein the mutant Fyn is T339G Fyn.

41. The method of claim 35, wherein the mutant enzyme is a mutant c-Abl.

42. The method of claim 41, wherein the mutant c-Abl is T315A Abl.

43. The method of claim 35, wherein the mutant enzyme is a mutant CAMK IIα.

44. The method of claim 43, wherein the mutant CAMK IIα is F89G CAMK IIα.

45. The method of claim 38, wherein the mutant enzyme is a mutant CDK2.

46. The method of claim 45, wherein the mutant CDK2 is F80G CDK2.

47. The method of claim 35, wherein the mutant protein kinase is a mutant Cdc28.

48. The method of claim 47, wherein the mutant Cdc28 is Cdc28-as1.

49. The method of claim 35, wherein the mutant enzyme is a mutant Fus3.

50. The method of claim 49, wherein the mutant Fus3 is Fus-as1.

51. The method of claim 35, wherein the mutant enzyme is a mutant methyltransferase.

52. A method of inhibiting the growth of a cell that expresses a mutant enzyme comprising incubating the cell with a protein kinase inhibitor of claim 7.

53. The method of claim 52, wherein the mutant enzyme is a mutant v-Src.

54. The method of claim 53, wherein the mutant v-Src is I338G v-Src.

55. The method of claim 52, wherein the mutant enzyme is a mutant c-Abl.

56. The method of claim 55, wherein the mutant c-Abl is T315A Abl.

57. The method of claim 52, wherein the mutant enzyme is a mutant CDK2.

58. The method of claim 57, wherein the mutant CDK2 is F80G CDK2.

59. The method of claim 52, wherein the mutant enzyme is a mutant Cdc28

60. The method of claim 52, wherein the mutant Cdc28 is Cdc28-as1.